

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Lincoln Road RV Park, Inc.
PO Box 9708
Helena, MT 59604-9708
2. Type of action: Application to for Beneficial Water Use Permit 41I 30111618
3. Water source name: Groundwater
4. Location affected by project: SE¼ of Section 18, T11N, R3W, Lewis and Clark County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant is requesting 4.25 acre-feet (AF) per year for lawn and garden irrigation of 2.39 acres in the Grand Valley Estates Subdivision (GVE). GVE is located in the SE¼ of Section 18, T11N, R3W, in Lewis and Clark County, approximately 8 miles north of the City of Helena. The Applicant will divert water from two existing wells under Provisional Permit No. 41I 30046072. No additional flow is requested as the permitted maximum flow rate of 100 gallons per minute (GPM) under Permit No. 41I 30046072 will be sufficient for the proposed irrigation use.

The proposed appropriation is located in the Upper Missouri River Basin Closure and the Applicant has submitted a mitigation plan to the Department of Natural Resources and Conservation (DNRC) to offset calculated surface water depletions caused by the proposed annual use of 4.25 AF. The Applicant will secure a Special Use Permit from Helena Valley Irrigation District (HVID) to purchase 5.50 AF of U.S. Bureau of Reclamation contract water and divert it into an infiltration trench to recharge groundwater and offset depletions to the surface waters of Silver Creek and Prickly Pear Creek above Lake Helena.

The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

Montana Department of Environmental Quality (MDEQ)
Montana Natural Heritage Program
Montana Department of Fish Wildlife & Parks (DFWP)

TMDL Information
Endangered-Threatened Species
Dewatered Stream Information

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: No Impact

The source is groundwater with a mitigation plan to offset depletions to surface water. An additional 4.25 AF of water will be pumped from two existing groundwater wells that currently are permitted to service the Grand Valley Estates Subdivision for multiple domestic up to 11 AF under Permit No. 41I 30046072. No additional flow is requested as the existing 100 gpm flow is adequate for the additional volume.

The mitigation plan involves the purchase of 5.50 AF from HVID to mitigate the volume and timing of net depletions to Silver Creek and Prickly Pear Creek above Lake Helena. The contract water will be diverted as needed into an infiltration trench during the Helena Valley Canal's operational season to achieve the necessary infiltration rate. The water will be diverted approximately 75 feet from the HVID canal into a 36 ft x 36 ft infiltration trench with a depth of 12 ft. To avoid possible mounding interactions with the HVID canal, the 5.50 AF will be diverted over 90 days and at a flow rate of 15 gpm.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: No Significant Impact

The source is groundwater and should not affect surface water quality. The mitigation plan to offset depletions to Silver Creek and Prickly Pear Creek to Lake Helena and should not affect surface water quality.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: No Significant Impact

DNRC analysis of the aquifer characteristics shows the annual volumetric flux in the project area to be 3,704 AF/year. The existing legal demands are 1,706.09 AF/year within the zone of influence. Given the quantity of water within the zone of influence, the quality of groundwater will not be adversely affected.

A mitigation plan was submitted to DNRC that includes the purchase of 5.50 AF from HVID. The purchased water will be pumped from the HVID canal into an infiltration trench to offset depletions and recharge the aquifer that is hydraulically connected to, and would potentially affect, the surface waters of Silver Creek and Prickly Pear Creek to Lake Helena. With the mitigation plan in place the supply or quality of surface water will not be adversely affected.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: No Significant Impact

Two wells were drilled for Grand Valley Estates in 2007. PWS-1 was drilled to a depth of 161feet, and PWS-2 was drilled to a depth of 158feet. Both wells were evaluated with a 24-hour aquifer tests with a maximum drawdown of 28.40feet and 31.51-feet, with pumping rates of 215 GPM and 210 GPM, respectively. Water is diverted from the wells using Goulds Model 100H-07 pumps with 7.5 h.p. Model 6M071 motors. Water is conveyed through a 4-inch, C900 PVC to the pump house. From the pump house, water is conveyed through a 4-inch, C900 PVC water main. From the water main, homes are serviced with a ¾-inch HDP pipe.

The wells have been in operation in conjunction with each other for over 10 years, which indicates their adequacy is sufficient for the existing and proposed uses. The wells, already constructed, will have now impact on hydrological or terrestrial systems.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: No Significant Impact

The Montana Natural Heritage Program identified the following species of concern within the project area: Spotted Bat (*Euderma maculatum*), Great Blue Heron (*Ardea herodias*), Black-tailed Prairie Dog (*Cynomys ludovicianus*), Bobolink (*Dolichonyx oryzivorus*), Golden Eagle (*Aquila chrysaetos*), Long-billed Curlew (*Numenius americanus*), Burrowing Owl (*Athene cunicularia*), Bald Eagle (*Haliaeetus leucocephalus*), Evening Grosbeak (*Coccothraustes vespertinus*), Clark's Nutcracker (*Nucifraga columbiana*), Northern Goshawk (*Accipiter gentilis*), Pileated Woodpecker (*Dryocopus pileatus*), Black-billed Cuckoo (*Coccyzus erythrophthalmus*), Varied Thrush (*Ixoreus naevius*), Trumpeter Swan (*Cygnus buccinator*),

Westslope Cutthroat Trout (*Oncorhynchus clarkia lewisi*), American White Pelican (*Pelecanus erythrorhynchos*).

For other *potential* species of concern, please see the complete species summary in the application file.

The Applicant is requesting an additional 4.25 AF per year for lawn and garden irrigation at Grand Valley Estates Subdivision. Water will continue to be diverted from an existing permit (No. 41I 30046072), no increase to the flow rate is proposed as the existing flow rate is sufficient to supply the added volume. The proposed appropriation is in the Upper Missouri Basin Closure and the Applicant will mitigate calculated depletions to surface water by purchasing 5.50 AF per year from HVID and divert the purchased water from the HVID canal at a location in the NWSE of Section 18, T11N, R3W, Lewis and Clark County, into an infiltration trench located in the same area to recharge groundwater to offset depletions. The proposal for additional volume to irrigate lawns and gardens and the associated mitigation plan should not adversely impact any of the species of concern within this project area.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: No Impact

The proposed project does not involve wetlands.

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: No Impact

The proposed project does not involve a pond.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: No Significant Impact

The use of groundwater for lawn and garden irrigation and the installation and use of an infiltration gallery and pipeline will not cause degradation of soil quality or stability. The soils are not susceptible to saline seep.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: No Significant Impact

Existing vegetative cover may be disturbed during installation of the pipeline- a 3-inch gravity-fed buried pipe from the HVID canal, approximately 75-feet to the infiltration gallery, a 36 ft x 36 ft x 12 ft pit. The project is located on private property and the applicants will be responsible for controlling noxious weeds.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No Significant Impact

Adverse air quality impacts from increased air pollutants are not expected as a result of this project.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: N/A

The project is not located on State or Federal. This section is not applicable.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No Significant Impact

None identified.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: No Significant Impact

The HVID will issue a Special Use Permit to the Applicant upon approval of this Permit.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: No Significant Impact

The proposed project will not impact access to or the quality of recreational and wilderness activities. The project is on private property.

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: No Significant Impact

The proposed project will not impact human health by increasing the volume or adding an infiltration gallery to an existing water right on private property.

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes___ No XX___ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination:

No Significant Impact

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? No impact.
- (b) Local and state tax base and tax revenues? No impact.
- (c) Existing land uses? No impact.
- (d) Quantity and distribution of employment? No impact.
- (e) Distribution and density of population and housing? No impact.
- (f) Demands for government services? No impact.
- (g) Industrial and commercial activity? No impact.
- (h) Utilities? No impact.
- (i) Transportation? No impact.
- (j) Safety? No impact.
- (k) Other appropriate social and economic circumstances? No impact.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts None identified

Cumulative Impacts None identified.

3. ***Describe any mitigation/stipulation measures:*** The annual consumptive use for lawn and garden irrigation for Grand Valley Estates was calculated to be 4.25 AF. Application for Beneficial Water Use Permit No. 41I 30111618 was submitted to the Department on June 30, 2017. The proposed appropriation is in the Upper Missouri Closed Basin area and requires a mitigation plan. A mitigation plan was submitted to DNRC in 2016 and later modified proposing to purchase 5.50 AF from the HVID and divert the purchased water into an infiltration trench to recharge groundwater and offset depletions. If the permit is granted, the Applicant will be required to maintain and submit records to the Department of monthly flow rates and volume appropriated.
4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** No alternative identified. The no action alternative would leave the subdivision without a beneficial water use permit for lawn and garden irrigation and in non-compliance with the Montana Water Use Act.

PART III. Conclusion

1. ***Preferred Alternative*** N/A
2. ***Comments and Responses*** N/A
3. ***Finding:***
Yes___ No_XX__ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

This project has little to no significant environmental impact. The impacts will be limited to the installation of a 75 ft. pipeline from the point of diversion (HVID canal) to a 36 ft x 36 ft and 12 ft deep infiltration trench for mitigation purposes. This Permit would bring the Applicant into compliance with DNRC rules and regulations.

Name of person(s) responsible for preparation of EA:

Name: Kristeen Wofford

Title: Water Resource Specialist

Date: 2/14/2020